



Data Security Best Practices

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Security

- A belated thanks for coming! Because...
 - You could be anywhere, doing anything other than this (especially those joining via webcast)
 - Being the “Security Guy” is like being the “video camera” guy at a family reunion – everyone stiffens up and you never get a hug
 - Nobody likes talking about security or “incidents”
 - Until they realize they don’t have any security or have had an “incident”
 - And by then, of course, it’s WAY. TOO. LATE.
 - It’s MUCH easier and cheaper to BE secure than it is to GET secure
- This is NOT a technical presentation. Let’s worry about the BASICS for now.

My Presentation

1. Intro (already done!)
2. What is Security?
3. Let's Talk About Risk
4. House Bills 5 and 232
5. Data Security and Breach Notification Guide
6. Get the Basics Right
7. Wrap Up



Do We Need Security?

- ▶ **Confidentiality**
 - Only the right people can see the data
- ▶ **Integrity**
 - The data are accurate and haven't been changed by an unauthorized person
- ▶ **Availability**
 - The data are there when you need them

Security Follows Function



Uh...



Um...

Most Secure Automobile in World



In 1916

"Cadillac V8 Cabriolet 1916" by Lars-Göran Lindgren Sweden - Own work. Licensed under CC BY-SA 3.0 via Wikimedia Commons
- https://commons.wikimedia.org/wiki/File:Cadillac_V8_Cabriolet_1916.jpg#/media/File:Cadillac_V8_Cabriolet_1916.jpg



Life is Risky

- Most ~~Victims~~ Humans are BAD at Judging Risk



Do NOT Listen to the Kitten



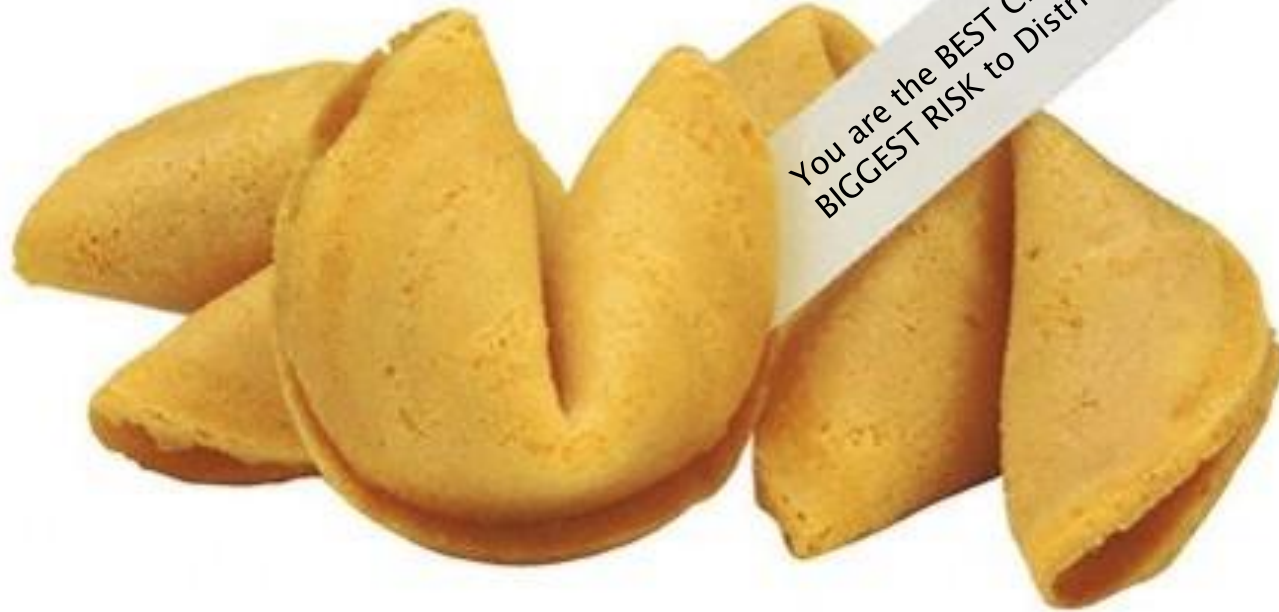
Why is there So Much Risk?

- Times REALLY HAVE changed
- Because so much of our lives now depend on computers and networks
- Because so much of our lives are now captured on computers and networks - contacts, bank information, birthdays, SSNs...
- Because it's much easier, more profitable, and less risky to rob a computer than a bank

www.us-cert.gov/ncas/tips/st04-001



Remember...



House Bill 5 (KRS 61.931 et seq)

- Defines PII
- Requires state agencies, schools, districts and their contract holders to keep data secured
- Requires state agencies, schools, districts and their contract holders to report data breaches
 - Talk to your CIO, who has been highly briefed
 - House Bill 5 document with Highlighting
 - Important to anyone who shares data

House Bill 232 (KRS 365.734)

- Protects student data from misuse by vendors by limiting its use to educational purposes, unless otherwise agreed to in writing by the students' parents or as permitted by FERPA
- Defines “student data”
 - Contract language should be amended to ensure vendors understand their responsibilities
 - [House Bill 232 document with Highlighting](#)

What Can I Do?

- Always secure your workstation
- Keep a strong password
- NEVER use the same password for multiple services
- Never give out a password
- Encrypt PII on portable drives
- Use good practices when e-mailing
- Use safe practices when browsing the Internet
- Report possible viruses immediately
- Realize that yes, WE ARE ALL targets (we have valuable data)
- Make cyber & physical security a REGULAR point of conversation in high-level meetings (ensure CIO/DTC is there, too)

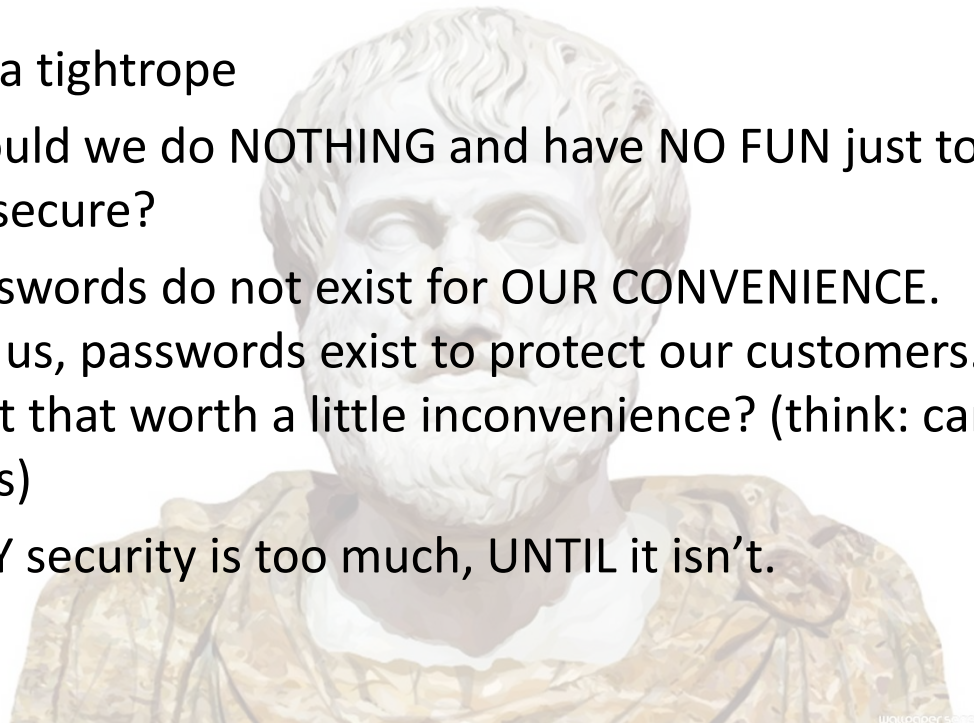


KDE Resources

- Data Security and Breach Notification Best Practice Guide:
 - <http://education.ky.gov/districts/tech/Pages/Best-Practice.aspx>
- Data Privacy and Security
 - <http://education.ky.gov/districts/tech/Pages/Data-Security-Privacy.aspx>

Convenience vs. Security

- It's a tightrope
- Should we do NOTHING and have NO FUN just to be secure?
- Passwords do not exist for OUR CONVENIENCE. For us, passwords exist to protect our customers. Isn't that worth a little inconvenience? (think: car keys)
- ANY security is too much, UNTIL it isn't.



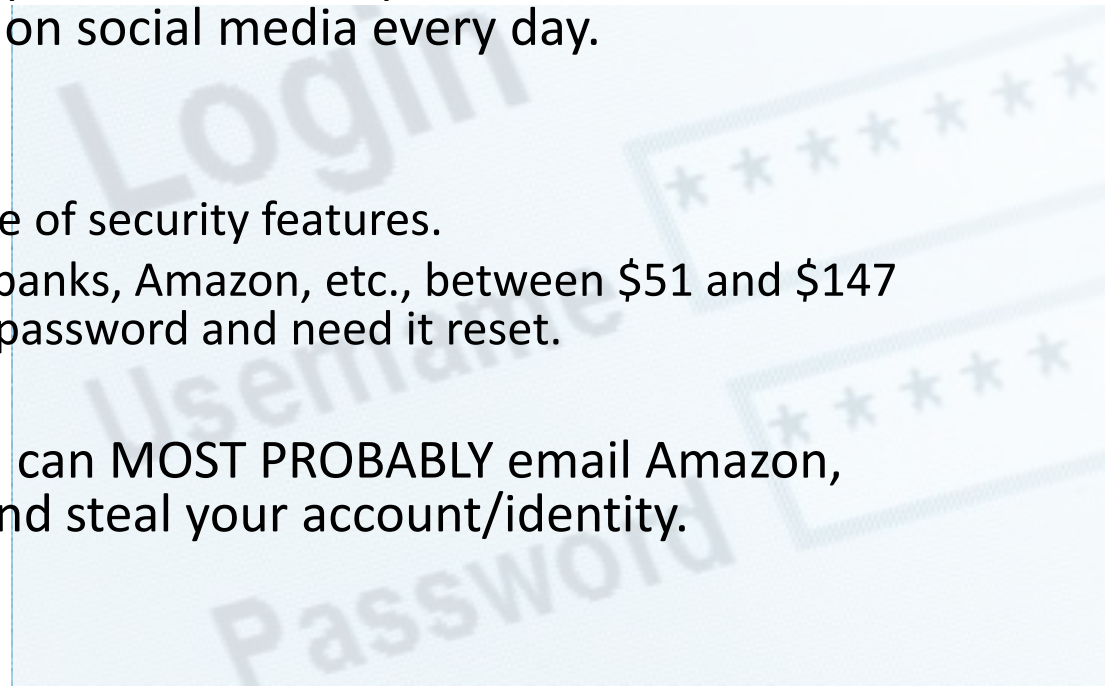
And Since I Have You Here...

Q: Do these questions seem familiar?

- What Is your favorite book?
- What is the name of the road you grew up on?
- What is your mother's maiden name?
- What was the name of your first/current/favorite pet?
- What was the first company that you worked for?
- Where did you meet your spouse?
- Where did you go to high school/college?
- What is your favorite food?
- What city were you born in?
- Where is your favorite place to vacation?

Answer:

- These are the most popular password reset questions IN ADDITION TO being information we share on social media every day.
 - They are CONVENIENT.
 - They are really the opposite of security features.
 - They save companies, like banks, Amazon, etc., between \$51 and \$147 whenever you forget your password and need it reset.
- With the answers to these, I can MOST PROBABLY email Amazon, Apple, Chase, Twitter, etc. and steal your account/identity.



Final Thoughts

- When we are all connected, everyone is
 - A Target
 - Defense
- Any system can be breached



Thanks a Bunch!

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